

SUMMARY

Prepared by Peg Hanna



Diesel Initiatives Stationary Workgroup Meeting

Held July 29, 2005 from 1:00-3:00

Meeting Location: DEP, Trenton

Meeting called by: Peg Hanna

Facilitator: Melinda Dower

Materials:

1. Further information on inventory
2. EPA guidance on incorporating voluntary mobile source measures into SIP

Introduction/Announcements.

1. DEP reminded everyone that the purpose of the workgroup is to develop a menu of control strategies to be submitted to Commissioner Campbell for consideration as the DEP develops its State Implementation Plan. The workgroup will evaluate each strategy based on technical and economic feasibility and environmental and health benefits, but will not eliminate any strategy. DEP will pen the report, but the report will be the voice of the workgroup, not the voice of the DEP writers.
2. DEP distributed a boilerplate chart that will be used for recording each of the strategies discussed.

Discussion

Topic 1: Review of inventory information distributed by DEP on July 15, 2005.

Discussion: The inventory information that was distributed did not break out stationary diesel engines. NJDEP will provide additional information as requested before the next meeting.

Topic 2: Boilerplate template for recording ideas.

Discussion: None

Topic 3: Discussion of potential strategies

Discussion: See strategy chart for comprehensive list of each item discussed. Specific discussions not captured on the chart are as follows:

- Someone questioned the energy density of LNG versus propane. *See Table 1 at bottom of these meeting minutes for specific information.*

Wrap-up

Next meeting is Tuesday, August 16 in Trenton, NJ at the main NJDEP building from 10:00 a.m. to 12:00 p.m. We'll be in the small conference room (Assistant Commissioner Skacel's conference room) in the 4th floor east wing. Conference call information is as follows, but keep in mind that there is a maximum of 6 callers allowed:

Call-in # (609) 826-3600

Bridge # 19205

Password # 456789

Table 1: Properties of Conventional and Alternative Fuels

Fuel Type	Diesel	Gasoline	Methanol	Ethanol	Propane	CNG
Energy Content (MJ/kg¹)	42.5	44.0	20.0	26.9	46.4	50.0
Liquid Density (kg/l²)	0.8 4-0.88	0.7 2-0.78	0.792	0.785	0.51	0.4225
Liquid Energy Density (MJ/l³)	36.55	33.0	15.84	21.12	23.66	21.13
Gas Energy Density (MJ/l³)						
-@ Atmosphere	--	--	--	--	0.093	0.036
-@ 200 Bar	--	--	--	--	--	7.47
Boiling Point, °C	140- 360	37-205	65	79	-42.15	-161.6
Research Octane No.	~25	92-98	106	107	112	120
Motor Octane No.		80-90	92	89	97	120
Cetane No.	45-55	0-5	5	5	~2	0

¹MJ/kg=megajoule per kilogram

²kg/l=kilogram per liter

³MJ/l=megajoule per liter

Source: STAPPA, 1996